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SuitSat-2 Transforms Into a Satellite

AMSAT News Service Bulletin 189.01
>From AMSAT HQ SILVER SPRING, MD.
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To All RADIO AMATEURS
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Due to storage considerations on the International Space Station, the two surplus Orlan space suits in storage on the International Space Station were discarded via the Progress Cargo Vessel. One of these suits was to be used to house the electronics for the upcoming SuitSat-2 mission where the batteries were to be mounted inside the suit, solar panels attached to the extremities with the electronics, video cameras and antenna mounted on the helmet by the ISS crew prior to deployment during an EVA.

The Progress, with the suits included, was undocked from ISS this past week.

The ARISS International Team has been informed that there is still space available for shipment of the SuitSat-2 electronics on the projected cargo flight to the Space Station in January 2010 and the EVA scheduled for April 2010 still has a 'SuitSat-2' deployment scheduled.

Consequently, the AMSAT team developing SuitSat-2 electronics on behalf of ARISS International is focusing on completing development in anticipation that deployment will still take place in Spring 2010 using a new structure to house it. In addition, the experiment being developed by Russia's Kursk State University is still expected to be integrated into the electronics once the US produced equipment is delivered to Russia this fall. Discussions are currently taking place between Russian ARISS members and the AMSAT project managers concerning the design of the new structure and where it will be constructed with these decisions to be made in the next few weeks.

The AMSAT team building the electronics is meeting July 10-12 in Phoenix to initiate integration testing of all of the components built in the US with subsequent testing to continue through the remainder of the summer in anticipation of shipping equipment to Russia in the fall.

The removal of the Orlan space suits from ISS removes the 'Suit' component of this deployment and at some point a new project name will be used to reflect the change in configuration. However, the significant importance of this project to both ARISS and AMSAT is not diminished.

ARISS sees this mission as an important component of education out-reach as it will provide an opportunity for students around the world to listen for recorded greetings from space as well as learn about tracking spacecraft in orbit.

Meanwhile, the deployment of SDX (Software Defined Transponder), the associated receiver and transmitter modules, and control electronics is a critical milestone for AMSAT as this upcoming flight provides an

opportunity to flight test the next generation of spacecraft hardware.
Lessons learned from this deployment will be applied to future flight
opportunities as AMSAT moves towards a 'modularization approach' to
spacecraft development with the expectation the future spacecraft
missions will utilize a derivative of SDX and the associated hardware.

[ANS thanks AMSAT VP-Manned Spaceflight Will Marchant, KC6ROL for
 the above information]

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